

Patent
10/699,102

REMARKS

Claims 1-14 and 24-27 are pending in the application (Claims 15-23 have been withdrawn from consideration). Claims 1 and 14 are the only independent claims under consideration.

Rejections Under 35 USC 103(a)

Claims 1-8, 10-14, 24 and 25 were rejected under 35 USC 103(a) as being unpatentable over US Patent 6,389,473 (Carmel et al.) in view of *newly-cited* US Patent 5,920,701 (Miller et al.) and *newly-cited* US Patent 6,321,260 (Takeuchi et al.); Claim 9 was rejected as being unpatentable over Carmel in view of Miller and Takeuchi in view of US Patent 6,920,110 (Roberts et al.); Claim 26 was rejected as being unpatentable over Carmel in view of Miller and Takeuchi in view of US Pub No. 20020083124 (Knox et al.); and Claim 27 was rejected as being unpatentable over Carmel in view of Miller and Takeuchi and Knox in view of US Pub No 20050240940 (Quinet et al.).

In view of the following discussion, each of these rejections is respectfully traversed and reconsideration is requested.

Independent Claim 1 is directed to a method for synchronously transferring an amount of local data from a local data storage medium to a remote data storage medium via a communications link having an available bandwidth, the local data storage medium associated with a local computer system having a local processor sequentially responsive to a plurality of local computer programs, the remote data storage medium associated with a remote computer system non-redundant of the local computer system and having a remote processor, the method including evaluating local user conditions associated with transfer of the local data, based on the currently available bandwidth and the amount of local data, approximating a transfer time for the local data, determining a status of the local processor, wherein the determining step includes determining if the local processor has reduced activity or is idle, based on the approximated transfer time, the local user conditions, and the status of the local processor, selecting a time of day at which to transmit the local data to the remote data storage medium, and automatically

Patent
10/699,102

arranging transfer of the local data to the remote data storage medium via the communications link at the selected time *of day*.

Independent Claim 14 is an apparatus claim corresponding to method Claim 1 and is directed to an apparatus for synchronously transferring an amount of local data from a local data storage medium to a remote data storage medium...., the apparatus including a computer-readable storage medium and a processor responsive to the computer-readable storage medium and to a computer program, the computer program, when loaded into the processor, operative to perform a method including evaluating local user conditions associated with transfer of the local data, based on the currently available bandwidth and the amount of local data, approximating a transfer time for the local data, determining a status of the local processor, wherein the determining step includes determining if the local processor has reduced activity or is idle, based on the approximated transfer time, the local user conditions, and the status of the local processor, selecting a time *of day at which* to transmit the local data to the remote data storage medium, and automatically arranging transfer of the local data to the remote data storage medium via the communications link at the selected time *of day*.

As explained in paragraph [0005] of Applicants' specification, as filed, a "typical local PC client has a single processor under independent control, and a limited bandwidth communication link to any remote data storage medium" – the "local PC may be unable to concurrently perform multiple processing-intensive tasks, such as transferring large data files and running unrelated user applications, and/or data transfers may be slow".

Applicants' proposed method takes these facts into account, by determining if a local processor is idle or has reduced activity, and using that determination (*in addition to the local user conditions* and the approximated time for transfer) *to select a time of day at which* to transmit the local data to the remote storage device.

As further explained at paragraph [0029], "the *user may specify conditions* associated with selection of user data 25, such as, among other conditions: where the data is located; file extensions associated with the data; *times, or events, which would trigger transfer of the data*; or any combination thereof...the user may request that user data 25 having file extensions such as .DOC or .JPG be *transferred immediately*, while user data 25 have file extensions such as .MPG or .RM be *transferred overnight*".

Patent
10/699,102

Carmel is directed to a method for “*real -time* broadcasting from a transmitting computer to one or more client computers – including ‘providing at the transmitting computer a data stream having a given data rate, and dividing the stream into a sequence of *slices*, each slice having a predetermined data size associated therewith’.

In Carmel, “data stream 40 comprises a series of data *slices* 42, 44, 46, 48, etc....each slice contains a segment of video and/or audio data, corresponding to a respective, successive time interval labeled T₁, T₂, T₃, etc.” (Col. 7, lines 23-25). In addition “time intervals T₁, T₂, T₃, etc are not all equal, but rather are adjusted by computer 34 in response to the transmission rate” (Col. 7, lines 42-45). These “time intervals” are simply time slots, each of which contain a data slice 42, 44, 46, 48, etc. Although these time intervals T₁, T₂, T₃, etc, may be ‘adjusted by computer 34 in response to the transmission rate’ (col. 7, lines 35-49, cited in the Action page 7, lines 1-3), they do not teach (or even suggest) a method that “selects a time of day at which to transmit local data to the remote data storage medium, and automatically arranges transfer of the local data to the remote data storage medium via the communications link at the selected time of day.”

Carmel does not teach, or suggest in any way, a method that, based on the approximated transfer time, the local user conditions, and the status of the local processor, selects a time of day at which to transmit the local data to the remote data storage medium, and automatically arranges transfer of the local data to the remote data storage medium via the communications link at the selected time of day.

The Final Action (page 8) acknowledges that Carmel and Takeuchi “do not state the term ‘a time of day’” – but takes the position that “a time of day at which as in real time is *implicitly taught by Carmel as stream in real time, col. 2, line 60 to col. 3, line 5*” – and further that Miller teaches this limitation in Fig. 7, and Table 1 in column 7.

First, Applicants respectfully submit that each of independent Claims 1 and 14 recite “based on (1) the approximated transfer time, (2) the local user conditions, and (3) the status of the local processor (note that reference numerals (1)-(3) are added herein to aid in discussion and are not recited in the claims), selecting a time of day at which to transmit the local data to the remote data storage medium, and automatically arranging transfer of the local data to the remote data storage medium via the communications link at the *selected time of day*.”

Patent
10/699,102

Again, Carmel is very specifically directed to '*real-time broadcasting*' (see e.g., col. 1, lines 50-53, "it is an object of the present invention to provide substantially continuous, high-bandwidth data streaming over a network..." – and also, col. 2, lines 17-21, "the division of the data stream into slices and the inclusion of the slice indices in the data stream...allows the broadcast to go on substantially *in real time* without the use of special-purpose hardware).

Even if Miller describes 'scheduling data transmission' from one or more content sources over a network to one or more replicated servers -- it would *not be obvious* to one skilled in the art, in *any way*, to somehow combine such teachings with those of Carmel and Takeuchi in the manner suggested in the Final Action. In fact, Carmel very specifically *teaches away from any such modification/combination of teachings* – in that Carmel is specifically directed to 'real-time' broadcasting.

In addition, Applicants note that Carmel fails to teach or suggest selecting a time of day at which to transmit local data to the remote storage medium based on (1) the approximated transfer time, (2) the local user conditions, and (3) *the status of the local processor*. The Final Action directs Applicants to col. 12, line 48-59 of Carmel, which describes how "if link 60 has not completed transmission of file 42 by the time the sixth file is ready for transmission, link 60 will have timed out...link 60 is terminated and is replaced by link 70". This is indicated to read upon Applicant's claimed 'selecting a time of day to transmit local data...based upon "(3) the status of the local processor"'. Applicants submit however, that the 'time-out indication' and subsequent 'replacement of link 60 with link 70', do not, in any way, suggest '*selecting a time of day*' based upon a '*status of the local processor*'.

Finally, the Final Action relies upon the alleged teachings of Takeuchi as providing yet another element not explicitly (or implicitly in Applicant's opinion) taught by Carmel – specifically, 'selecting a time of day at which to transmit local data based upon "(2) local user conditions"'. As detailed in para's [0029]-[0030] of Applicant's specification as filed, a "user may specify conditions associated with selection of user data...such as...where the data is located; file extensions associated with the data; times, or events, which would trigger transfer of the data; or any combination thereof...[f]or example, the user may request that user data 25 having file extensions such as .DOC or .JPG be transferred immediately, while user data 25 have file extensions such as .MPG or .RM be transferred overnight".

Patent
10/699,102

Takeuchi describes only "application 401", in each of the sender nodes, receiver nodes and router nodes, 'for setting various parameters to be used to send and receive continuous media data and allocate resources'. Takeuchi further describes how "the application sets the parameters to be registered in the allowable CPU time upper limit table (1006) which are used to reserve the CPU resources and each parameter of the necessary CPU time/unit transaction table" (col. 16, lines 43-47). Takeuchi continues to describe various "functions [that] are used for this setting" (col. 16, lines 49- col. 17, line 10).

Takeuchi does not, in any way, teach or suggest the element acknowledge to be missing from Carmel, of selecting a time of day at which to transmit local data based upon "(2) local user conditions".

For at least the foregoing reasons, Applicants respectfully submit that each of independent Claims 1 and 14 is patentable over the combined teachings of Carmel, Takeuchi and Miller.

Dependent Claims 2-13 and 24-27 are also believed to be clearly patentable over the art of record for all of the reasons indicated above with respect to Claim 1, from which they depend, and even further distinguish over the cited references by reciting additional limitations.

Dependent Claim 26 further recites that the local user conditions comprise file extensions of the local data.

The Action relies upon the alleged teachings of Carmel, Miller, Takeuchi and Knox to reject Claim 26. On page 20 of the Final Action, the Examiner takes the position that "Miller implicitly teaches the file extension as criterion" (to select a time of day at which to transmit local data). As support for this statement, the Examiner recites col. 6, lines 52-59 of Miller, that "the priority level for each content source 12, 14 is assigned based on some criterion...certain content sources 12, 14 may be charged a greater fee by the scheduler..." - Applicant submits that this does not, in any way, implicitly teach 'using a file extension' as criterion. In addition, even if Knox describes 'analyzing the content of the uploaded data file' (e.g., a *.rm file indicates a file format compatible with the Real Media file structure) - Knox (like Carmel, Miller and Takeuchi), does *not* teach or suggest selecting a time of day at which to transmit local data based upon a local user condition comprising file extensions of the local data.

Patent
10/699,102

Claim 27 was rejected as being unpatentable over Carmel in view of Miller and Takeuchi and Knox in view of Quinet.

Again, dependent Claim 27 recites that the "local data having a first file extension is transferred immediately and local data having a second file extension is transferred at a later time of day". The Action attempts to arrive at the method defined by Claim 27, by turning to the alleged teachings of Carmel – Miller – Takeuchi – Knox AND Quinet, and somehow 'finding' various elements and then *combining* those elements in a manner that would be 'obvious' on one of ordinary skill in the art. Quinet's description of "updating priorities" according to a rule wherein "the file extension looks like HTML" to "ensure that a HTML page requested from the bookmarks or typed in directly will be *requested* with a high priority" simply does not teach or suggest a method in which a "time of day" is selected based upon local user conditions – the local user conditions being such that 'local data having a first file extension is transferred immediately and local data having a second file extension is transferred at a later time of day'. This is not taught or suggested by Quinet by itself or in any combination with Carmel, Miller, Takeuchi and Knox.

For all of the foregoing reasons, Applicant again respectfully submits that each of the pending claims is patentable over the combined teachings of Carmel, Miller, Takeuchi, Knox and Quinet.

Should the Examiner be of the view that an interview would expedite consideration of this Response After Final Rejection, or of the application at large, request is made that the Examiner telephone the Applicants' undersigned attorney at (908) 518-7700 in order that any outstanding issues be resolved.

Respectfully submitted,


Karin L. Williams
Registration No. 36,721

Patent
10/699,102

Please Continue to Send All Correspondence to:

Mayer & Williams PC
251 North Avenue West, 2nd Floor
Westfield NJ 07090

(908) 518-7700
(908) 518-7795 fax